**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

**Claim 1 (currently amended):** A process for manufacturing a high-strength, high-ductility alloy carbon steel, said process comprising:

(a) ~~forming~~ cooling a solid carbon alloy steel having a homogeneous austenite phase with all alloying elements in solid solution so as to form a carbon steel alloy having a microstructure consisting of laths of martensite alternating with from about 0.5% to about 15% by volume of films of retained austenite, and

(b) cold working ~~said~~ the carbon steel alloy from step (a) without intermediate heat treatment to a reduction sufficient to achieve a tensile strength of at least about 150 ksi.

**Claim 2 (previously presented):** The process of claim 1 wherein step (b) comprises cold working said carbon steel alloy to a reduction sufficient to achieve a tensile strength of from about 150 ksi to about 500 ksi.

**Claim 3 (previously presented):** The process of claim 1 wherein step (b) comprises cold working said carbon steel alloy to a cross-sectional area reduction of at least about 20% per pass.

**Claim 4 (previously presented):** The process of claim 1 wherein step (b) comprises cold working said steel alloy to a cross-sectional area reduction of at least about 25% per pass

**Claim 5 (previously presented):** The process of claim 1 wherein step (b) comprises cold working said carbon steel alloy to a cross-sectional area reduction of from about 25% to about 50% per pass.

**Claim 6 (previously presented):** The process of claim 1 wherein step (b) comprises cold working said carbon steel alloy in a series of passes without heat treatment between passes.

**Claim 7 (previously presented):** The process of claim 1 wherein step (b) is performed at a temperature of about 100C or below.

**Claim 8 (previously presented):** The process of claim 1 wherein step (b) is performed within approximately 25C of ambient temperature.

**Claim 9 (previously presented):** The process of claim 1 wherein said carbon steel alloy is in the form of a rod or wire, and step (b) comprises drawing said carbon steel alloy through a die.

**Claim 10 (previously presented):** The process of claim 1 wherein said carbon steel alloy is in the form of a sheet, and step (b) comprises rolling said carbon steel alloy.

**Claim 11 (currently amended):** The process of claim 1 wherein step (a) <u>further</u> comprises

(i) forming a carbon steel alloy composition having a martensite start temperature of at least about 300C,

(ii) heating said carbon steel alloy composition to a temperature sufficiently high to cause austenitization thereof, to produce a homogeneous austenite phase with all alloying elements in solution, and

(iii) cooling said homogeneous austenite phase through said martensite transition range at a cooling rate sufficiently fast to achieve said microstructure substantially avoiding carbide formation at interfaces between said laths of martensite and said films of retained austenite.

**Claim 12 (previously presented):** The process of claim 11 wherein said carbon steel alloy composition having a martensite start temperature of at least about 350C.

**Claim 13 (previously presented):** The process of claim 11 wherein said retained austenite films are of a uniform orientation.

**Claim 14 (previously presented):** The process of claim 11 wherein said carbon steel alloy composition consists of iron and alloying elements comprising from about 0.04% to about 0.12% carbon, from 0% to about 11% chromium, from 0% to about 2.0% manganese, and from 0% to about 2.0% silicon, all by weight.

**Claim 15 (previously presented):** The process of claim 11 wherein said temperature of step (ii) is from about 800C to about 1150C.

**Claim 16 (canceled):**

**Claim 17 (currently amended):** The process of claim ~~16~~ 11 wherein step (iii) comprises cooling said homogeneous austenite phase to a temperature of from about 800C to about 1,000C.

**Claim 18 (currently amended):** The process of claim ~~16~~ 11 wherein step (ii) comprises heating said carbon steel alloy composition to a temperature of from about 1,050C to about 1,170C, and step (iii) comprises cooling said homogeneous austenite phase to a temperature of from about 800C to about 1,000C.

**Claim 19 (currently amended):** The process of claim ~~16~~ 11 wherein said carbon steel alloy composition consists of iron and alloying elements comprising from about 0.02% to about 0.14% carbon, from 0% to about 3.0% silicon, from 0% to about 1.5% manganese, and from 0% to about 1.5% aluminum, all by weight.

**Claim 20 (previously presented):** The process of claim 1 wherein said films of retained austenite constitute from about 3% to about 10% by volume of said microstructure.

**Claim 21 (previously presented):** The process of claim 1 wherein said films of retained austenite constitute from about 0.5% to about 5% by volume of said microstructure.